# CILogon 2.0



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#### CILogon 2.0

- 3 year NSF CICI project
  - January 2016 December 2018
- Provide an integrated open source
   Identity and Access Management (IdAM)
   platform for cyberinfrastructure
  - CILogon: federated identity management
  - COmanage: collaborative organization management
- Support international collaborations



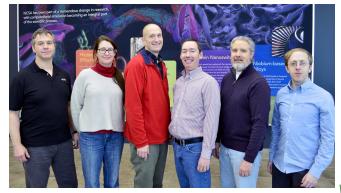
## CILogon 2.0 Team





- Jim Basney
- Terry Fleury
- Jeff Gaynor
- Venkat Yekkirala

- Heather Flanagan
- Scott Koranda
- Benn Oshrin
- Arlen Johnson





# CILogon OSG CA

- Entered production January 2016
- □ CA policy accredited by IGTF
- Passed XSEDE Operations Acceptance
- □ Transitioned OSG CA to use CILogon infrastructure operated by XSEDE
- □ Sharing Hardware Security Modules between CILogon and XSEDE
- Integrated with OSG registration process
- Using new CILogon HTTPS API for issuance of certificates by OSG front-end



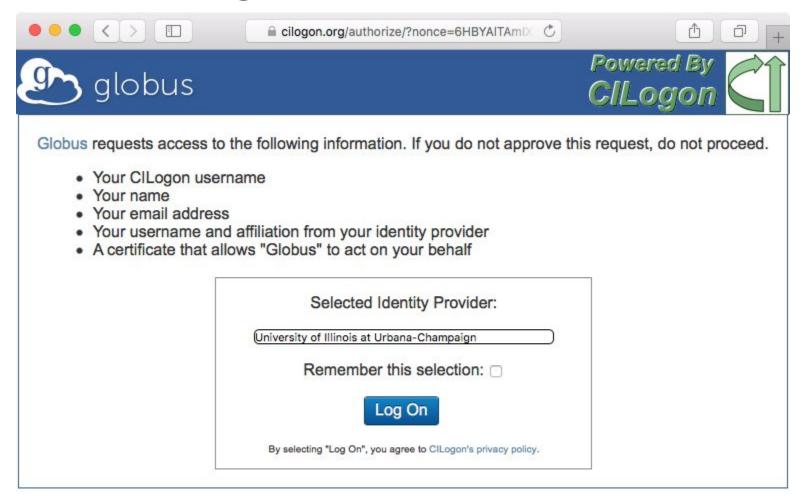
# SAML to OpenID Connect (OIDC) Gateway

- Entered production January 2016
- Supporting e-Science clients
  - Review & approval by CILogon staff
- User consent based on requested scopes
  - openid, profile, email
  - org.cilogon.userinfo (eppn, affiliation)
  - edu.uiuc.ncsa.myproxy.getcert
     (to allow X.509 certificate issuance)
  - VO attributes



www.cilogon.org/oidc

# CILogon User Consent





# **Encouraging Federated Logins**

- In February 2016, Globus began listing InCommon IdPs directly, rather than as "alternate login" option
  - InCommon / CILogon use doubled!



### CILogon-enabled Apps

- ATLAS Connect
- CMS Connect
- DataONE
- DOE KBase
- Duke CI Connect
- Fermilab New
- Globus

- IU CI Gateway
- LIGO
- OSC OnDemand New
- OSG Connect
- SeedMe
- XSEDE



## Supporting Fermilab

- In Summer 2016, Fermilab transitioned to using CILogon for short-lived certificates and retired the Fermilab KCA
- 350+ active Fermilab users in October

- Operating an InCommon IdP is easier than operating an IGTF CA
  - #1 challenge: Hardware Security Modules



## **Enabling Global Interfederation**

- Research & Scholarship
  - https://spaces.internet2.edu/display/InCFede ration/Research+and+Scholarship+Category
- Security Contacts in metadata
  - https://spaces.internet2.edu/display/InCFede ration/Contacts+in+Metadata
- Security Incident Response Trust Framework for Federated Identity
  - https://refeds.org/sirtfi



# Supporting Int'l IdPs (Sep 2016)

- Thanks to InCommon joining eduGAIN
- CILogon policy update approved in July by IGTF
- Requiring R&S + Sirtfi

www.cilogon.org/news/expanding-idps





#### **User-Driven Problem Resolution**

There was a problem logging on. Your identity provider has not provided ClLogon with required information about you.

First Name: MISSING
Last Name: MISSING
Display Name: MISSING

Contact your identity provider to let them know you are having having a problem logging on to CILogon.

Technical Contact: Technical Support <<u>support@example.edu</u>>

Alternatively, you can contact us at the email address at the bottom of the page.



#### Oct 2016 Problem Report

anl.gov berkeley.edu fnal.gov hawaii.edu ligo.org mdanderson.org muohio.edu nih.gov njit.edu okstate.edu sdstate.edu sfsu.edu swmed.edu uah.edu uakron.edu uc.edu ucla.edu uhd.edu unr.edu upenn.edu utdallas.edu utep.edu uvm.edu vt.edu wisc.edu

dur.ac.uk gla.ac.uk lancs.ac.uk leeds.ac.uk liv.ac.uk manchester.ac.uk rhul.ac.uk stfc.ac.uk sussex.ac.uk unipv.it



#### Most Used IdPs - Oct 2016

1. Fermilab R&S 11. UNL ECP R&S 12. Indiana U 2. LIGO ECP R&S R&S 13. U Minnesota 3. NIH 4. U of Michigan R&S 14. U of Colorado R&S ECP R&S 15. U of Cincinnati 5. Ohio State Sirtfi R&S 6. Purdue 16. ANL R&S 7. Google R&S 17. JHU 8. UIUC R&S 18. Yale ECP R&S 9. U Chicago R&S 19. U Florida Sirtfi R&S ECP 10. UCLA 20. UC Berkeley R&S

(unique active users per IdP)



#### All IdPs used - Oct 2016

Fermi National Accelerator Laboratory LIGO Scientific Collaboration National Institutes of Health University of Michigan **Ohio State University Purdue University Main Campus** University of Illinois at Urbana-Champaign University of Chicago **University of California-Los Angeles** University of Nebraska-Lincoln Indiana University **University of Minnesota** University of Colorado at Boulder **University of Cincinnati Main Campus Argonne National Laboratory Johns Hopkins** Yale University University of Florida University of California, Berkeley Lawrence Berkelev National Laboratory **University of Southern California** Stanford University Michigan State University **Cornell University** Case Western Reserve University University of Wisconsin-Madison University of Utah The University of Arizona Penn State Carnegie Mellon University University of California-San Diego **New York University** Montana State University - Bozeman **Iowa State University** 

**Old Dominion University** Northwestern University University of Wyoming University of North Carolina at Chapel Rice University Oak Ridge National Laboratory University of Rochester University of California-Santa Barbara University of Hawaii Massachusetts Institute of Technology Clemson University University of Washington Texas A & M University **Princeton University** University of California, Davis **Tufts University** Columbia University Arizona State University West Virginia University **University of Notre Dame** Rutgers, The State University of New **Ohio University Main Campus** University of Maryland College Park University of California-Irvine **Duke University** University of South Dakota University of Iowa Georgia Institute of Technology University of Pittsburgh The George Washington University Oklahoma State University System University of Oklahoma Colorado School of Mines **Brown University** Vanderbilt University University of Virginia **Texas Tech University** Stony Brook University Oregon State University

North Carolina State University Colorado State University **Boston University** University of Nebraska Medical Center University of California, San Francisco **Boise State University** University of North Carolina At Charlotte University of Illinois at Chicago University of Houston University of Dayton Marshall University Georgetown University California Institute of Technology **Baylor College of Medicine** University of Missouri System University of California, Riverside University of Arkansas University of Alabama, The **Lehigh University** Weill Cornell Medical College University of Texas Southwestern Medical Center University of New Mexico **United ID Rockefeller University** ICER - Mali Florida International University **ESnet** Woods Hole Oceanographic Institution Virginia Polytechnic Institute and State University **Utah State University** University of Vermont University of South Carolina University of Pennsylvania University of Nevada, Reno **University of Maryland Baltimore** University of California, Santa Cruz

Ohio Technology Consortium (OH-TECH)

Texas State University - San Marcos San Diego State University **Louisiana State University** Lafayette College Kansas State University Brookhaven National Laboratory Worcester Polytechnic Institute Western Michigan University University of Wisconsin-Milwaukee University of Texas at Dallas University of Tennessee University of North Carolina at Greensboro University of Maryland Baltimore County University of Maine System University of Kansas Medical Center University of Kansas University of Houston Libraries University of Delaware University of Alaska Statewide System University of Alabama at Birmingham The Broad Institute of MIT and Stockholms universitet Southern Methodist University South Dakota State University ProtectNetwork **National Center for Supercomputing** Applications Internet2 Harvey Mudd College Georgia State University George Mason University CERN Cedarville University California State University, Fullerton Brandeis University Boston College



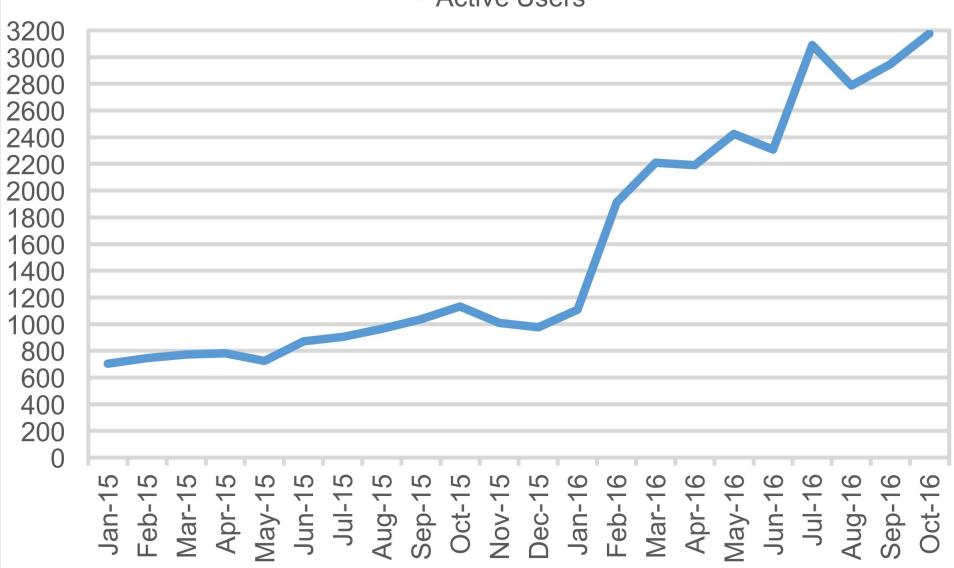
University of Texas at Austin

**Baylor University** 

Augusta University

# CILogon Monthly Usage

Active Users



## CILogon 2.0 - Registry Beta

- For early adopters of CILogon 2.0 collaboration management (COmanage)
- Using upcoming COmanage 1.1 release
- Visit www.cilogon.org to sign up







#### Thanks!



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